



# ZVK-77D

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## USER MANUAL

# ZoneVu



**ZVK-77D**  
CCTV Keyboard  
Issue 08

ZVK-77D

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## Introduction

Thank you for purchasing Meyertech's ZVK-77D. Please read this user guide prior to using this product. It will help you to achieve the maximum benefit from the product. The manual covers installation, operation and maintenance of a ZVK-77D.

### What is a ZVK-77D?

A ZVK-77D is part of the ZoneVu CCTV Control family. Meyertech's new ZVK-77D system keyboard is the latest in the range of next generation ZoneVu products. Designed to provide maximum functionality the ZVK-77D is capable of controlling multiple independent sites, performing system configuration and integrating CCTV peripheral devices including VCR's and Multiplexers.

The design of the ZoneVu ZVK-77D System Keyboard uses the latest materials and technology available to bring superior levels of functionality and integration to the CCTV control room.

The ZVK-77D offers users three modes of operation; Site mode permits both local and intersite selection and control of cameras; PCI mode provides camera control facilities only when used in conjunction with Meyertech's FUSION workstation, a PC based GUI application running under Windows; Standalone mode, a mode used exclusively to control cameras and domes directly without the requirement of a matrix.

### KEY FEATURES

- Ergonomic design to minimize RSI
- 3-axis proportional joystick camera control
- Menu-driven 'soft-key' navigation incorporating user configurable menus
- Large area LCD combining text and graphic information
- 16-bit embedded processing power
- Multiple user support with independent log-on
- PCI mode operation
- Site mode operation
- Full hierachal priority camera control
- Compatible with the ZoneVu product range
- Remote configuration and backup via Meyertech's Mpower software

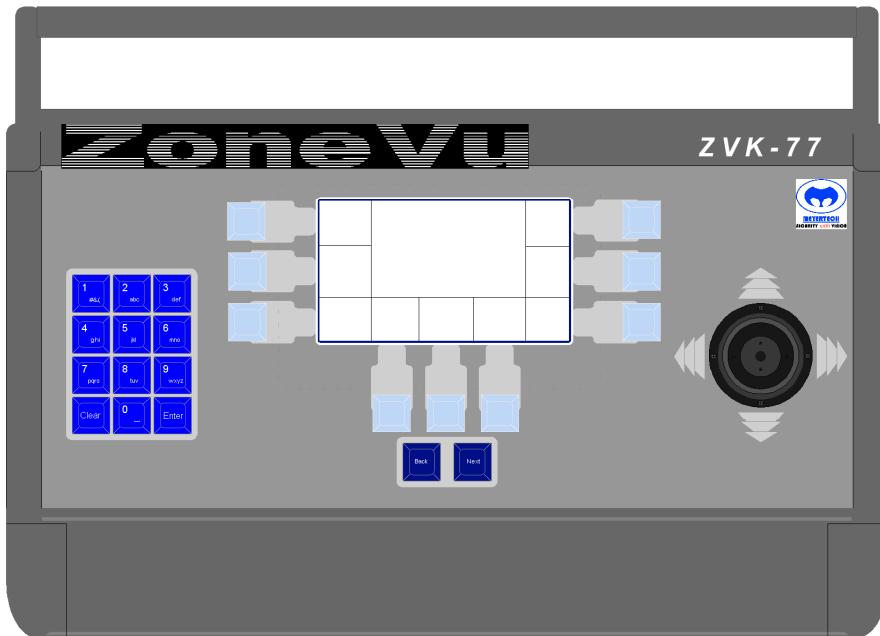
**The features described in this manual refer to :**

**Version 2.8.4.0 of the ZVK-77 firmware**

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## ZVK-77D LAYOUT



### Numeric Keys

The numeric keys (light blue left hand side) are used for number entry. These keys are labelled **0** to **9**, **Clear** and **Enter**.

- The **Enter** key is also used as a select key when a specific option is highlighted.
- The **Clear** key is also used as the Monitor select key.
- The numeric keys are also used for text entry (as per a telephone keypad)

### Menu Keys

The menu keys (dark blue centre bottom) are used for navigating the menus. These keys are labelled **Back** and **Next**.

### Softkeys

The Softkeys (pale blue centre) are configurable and will perform the adjacent action shown on the display. These keys are not labelled.

### Joystick

The joystick has 3 axis of movement – left/right, up/down and twist clockwise/anti-clockwise.

It also has a centre mounted button that is used to change the functionality of the twist action.

Note: in this manual keys to be pressed are shown highlighted in italics eg **Select Site**

ZVK-77D

## Screen layout

The screen is split into 3 areas:

- **Softkeys**

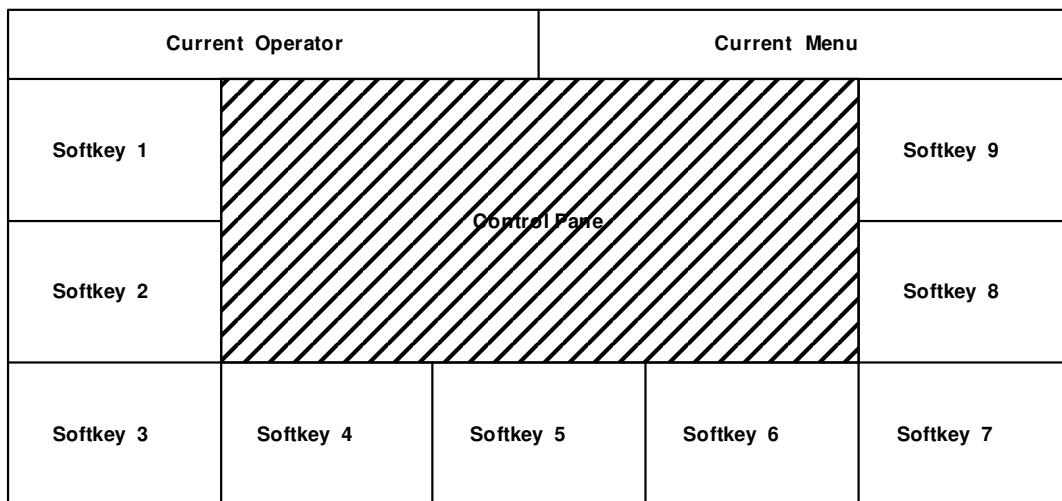
These are distributed around the left, bottom and right of the display.

- **Control Pane**

This takes up the centre of the display and is used for operator information and feedback

- **Status Bar**

This is along the top of the display. On the left it displays the name of the current operator and on the right it displays the name of the currently active menu.



## Menus

The ZVK-77D operation is controlled by which **menu** is currently selected.

The following menus are currently available:

- **Logged Off**  
The keyboard power up mode before an operator has logged on.
- **Select Mode**  
An operator has logged on and can now select a specific (available) menu.
- **PCI Mode**  
PC Interactive or PCI mode is a special interactive mode of operation when the ZVK-77D is operated in tandem with a Meyertech FUSION workstation. In this mode only the camera control facilities of the ZVK-77D are available to the operator.  
Selection of the system cameras is performed exclusively by the FUSION workstation. The interactive nature of FUSION and the ZVK-77D ensures that the camera displayed on an operators spot monitor is the one controllable from the ZVK-77D.
- **Site Mode**  
Site mode, incorporating Classic mode and Standalone mode, is the primary mode of operation for controlling the CCTV system.
- **Alarm Mode**  
Alarm mode is used to manage the reporting and handling of alarms.
- **MUX Mode**  
Multiplexer mode is used to control multiplexers. This mode should also be used to access certain multiplexer type commands that are supported by DVRs.
- **VCR Mode**  
VCR mode is used to control VCR and DVRs.
- **Relay Mode**  
Relay mode is a mode used specifically to control the Meyertech ZVS-IOM8 relay modules.
- **Setup Mode**  
Setup mode is used to both setup and program the ZVK-77D and also a range of Meyertech receivers and matrices.

The following sub menus are currently available

- **Camera Menu**  
Camera menu is used when controlling the advanced features of supported cameras.
- **Sequence Control Menu**  
Sequence control menu is used to control sequence patterns.
- **Timeout Override Menu**  
Timeout override menu is used to override specific timed functions of a ZoneVu system.



## Operator feedback

### Messages

Status messages are generated by the keyboard to report information to the operator. This may be such things as reporting on the control status of a receiver eg Control Denied.

Status messages appear as pop-up windows in the centre of the display. They will disappear automatically after a short period of time.

### Input

The operator is required to enter information in several different ways – depending on circumstance and type.

### Pop-up messages and Info Boxes

Pop-up windows are used in some menus to show messages over the current screen layout. Some will display until any key is pressed, others will automatically clear after 2 seconds if no key is pressed.

Some windows require confirmation from the user, normally using the **Clear** or **Enter** keys.

### Numeric and Text entry

- Via a pop-up window
- Use the numeric keypad and finish with **Enter**
- Cycle through letters as on a telephone
- **Back** key to cancel operation
- **Clear** key to delete
- Symbols can be inserted by using the Softkey, **Insert symbol**.
- A new line can be included by using the Softkey, **Newline**.

### List Selection entry

- Current selection is highlighted
- **Back** and **Next** to move through the list
- Scrollable list when more than 9 items
- Softkey functions will be applied to current selection
- Holding the **Back** key down cancels the operation.

## Softkeys

Softkeys are keys used by the operator, the function of which can vary with regard to current mode of operation and overall configuration.

The use of softkeys allows the installer to tailor an installation to the exact needs of an operator. Commands and menus that are not applicable to (or allowed by) an operator can be removed from an operators menus but left on the managers menus, providing an optimised display reflecting the operations carried out by different users of the CCTV operator.

Each menu consists of a series of commands that can be assigned to specific softkeys. The menus are navigated using the following keys:

- **Back**  
Displays previous menu screen.
- **Next**  
Displays next menu screen. If no more menu screens, returns to the first menu screen.
- **Back** held down  
Exits the current menu.

For each menu the configuration of softkeys can be modified for each of the 3 operator types.

### Select Mode

Function	Description	Default (page, position)		
		User	Mgr	Eng
Log off	Log off the current operator	1.1	1.1	1.1
Info screen	Displays keyboard status information	1.2	1.2	1.2
PCI Mode	Selects PCI mode of operation	1.3	1.3	1.3
Site Mode	Selects Site (classic) mode of operation	1.4	1.4	1.4
Alarm Control	Selects Alarm mode of operation		1.5	1.5
MUX Mode	Selects Multiplexer mode of operation		1.6	1.6
VCR Mode	Selects VCR/DVR mode of operation		1.7	1.7
Relay Mode	Selects Relay mode of operation		1.8	1.8
Program / Setup	Configuration and setup mode			1.9
Audit	Review the audited keyboard operations*			(2.1)

\* currently only available via Meyertech logon.

**PCI Mode**

<b>Function</b>	<b>Description</b>	<b>Default (page, position)</b>		
		Usr	Mgr	Eng
Slow mode	Puts the currently selected ZoneVu receiver into slow mode	1.3	1.3	1.3
Home	Sends the Current camera to it's home position.	1.4	1.4	1.4
Nudge	Nudges the focus or zoom on the currently selected device. Opposite of the current joystick twist setting.	1.5	1.5	1.5
Nudge	Nudges the focus or zoom on the current camera. Opposite of the current joystick twist setting.	1.6	1.6	1.6
Preset 3	Sends the current camera to it's preset 3 position.	1.7	1.7	1.7
Preset 2	Sends the current camera to it's preset 2 position.	1.8	1.8	1.8
Preset 1	Sends the current camera to it's preset 1 position.	1.9	1.9	1.9
Lamp	Toggles the lamp setting on the current camera.	2.1	2.1	2.1
Wash	Sends a wash command to the current camera.	2.2	2.2	2.2
Wipe	Toggles the wiper setting on the current camera.	2.3	2.3	2.3
Aux1	Toggles the auxiliary relay 1 on the current camera.	2.4	2.4	2.4
Aux2	Toggles the auxiliary relay 2 on the current camera.	2.5	2.5	2.5
Manual Iris	Toggles between manual and automatic iris on the current camera.	2.6	2.6	2.6
VCR Mode	Switches into VCR mode		3.2	3.2
MUX Mode	Switches into MUX (multiplexer) mode.		3.3	3.3
Relay Mode	Switches into Relay mode.		3.3	3.3

Function	Description	Default (page.position)		
		Usr	Mgr	Eng
Select Monitor	Selects the new user monitor. The next numeric entry followed by <b>Enter</b> will change the current monitor.  Pressing the <b>Enter</b> key without a number defaults the current monitor to the default user monitor configured in the setup menus.	1.1	1.1	1.1
Select Site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site.  Site 0 is always the operators local site.	1.2	1.2	1.2
Seq. Control	Switch into Sequence Control mode.	1.3	1.3	1.3
Relay Monitor	Copies the camera shown on the operators current monitor onto the previously configured relay monitor.  This command is often used to send a live incident to a remote police station.	1.4	1.4	1.4
Zonal Switch	Brings up a list of configured zonal switches – switches a series of previously selected cameras to monitors. The required zonal switch is selected from the now displayed list.	1.5	1.5	1.5
Record	Start the configured user VCR/DVR recording.  This key is provided as a shortcut for starting a VCR/DVR recording which can be done within the VCR mode.	1.6	1.6	1.6
Alarm Control	Switch into Alarm mode.	1.7	1.7	1.7
VCR Mode	Switch into VCR mode.	1.8	1.8	1.8
MUX Mode	Switch into MUX (multiplexer) mode.	1.9	1.9	1.9
Release Control	Release control of the currently selected and controlled device.	2.1	2.1	2.1
Global Command	Used to send a command to all local devices	2.2	2.2	2.2
Slow mode	Puts the currently selected ZoneVu receiver into slow mode	2.3	2.3	2.3
Home	Sends the current camera to it's home position.	2.4	2.4	2.4
Nudge	Nudges the focus or zoom on the current camera. Opposite of the current joystick twist setting.	2.5	2.5	2.5
Nudge	Nudges the focus or zoom on the current camera. Opposite of the current joystick twist setting.	2.6	2.6	2.6
Preset 3	Sends the current camera to it's preset 3 position.	2.7	2.7	2.7
Preset 2	Sends the current camera to it's preset 2 position.	2.8	2.8	2.8
Preset 1	Sends the current camera to it's preset 1 position.	2.9	2.9	2.9
Lamp	Toggles the lamp setting on the current camera.	3.1	3.1	3.1
Wash	Sends a wash command to the current camera.	3.2	3.2	3.2
Wipe	Toggles the wiper setting on the current camera.	3.3	3.3	3.3
Aux 1	Toggles the auxiliary relay 1 on the current camera.	3.4	3.4	3.4
Aux 2	Toggles the auxiliary relay 2 on the current camera.	3.5	3.5	3.5
Aux 3	Toggles the auxiliary relay 3 on the current camera.	3.6	3.6	3.6
Manual Iris	Toggles between manual and automatic iris on the current camera.	3.7	3.7	3.7
Auto Focus	Toggles between manual and automatic focus on the current camera.	3.8	3.8	3.8
Timeout Over-ride	.Switches to the Timeout Override menu	3.9	3.9	3.9
Select Preset	Send the current camera to a preset position. The next numeric entry followed by <b>Enter</b> will be the selected preset number.	4.1	4.1	4.1
Store Preset	Sends a store preset command to the current camera. The next numeric entry followed by <b>Enter</b> will be the selected preset number that the device will store its current position	4.2	4.2	4.2



	against.			
Preset Patrol	Starts the current camera on a preset patrol. The next numeric entry followed by <b>Enter</b> will be the selected patrol number.	4.4	4.4	4.4
Random Patrol	Starts the current camera on a random patrol.	4.5	4.5	4.5
Store Patrol	Switches to the Store Patrol Menu.	4.6	4.6	4.6
Record Mimic	Sends a record mimic command to the current camera. The operator will be prompted to move the selected device through the required mimic patrol.	4.8	4.8	4.8
Mimic Patrol	Starts the current camera on a mimic patrol. The next numeric entry followed by <b>Enter</b> will be the selected mimic number.	4.9	4.9	4.9
Relay Control	Switches to Relay mode.	5.1	5.1	5.1
Next Trunk	Switches the next video trunk from a remote site, to the currently selected monitor.	5.2	5.2	5.2
Select Trunk	Requests the use of a specific video trunk from a remote site. The next numeric entry followed by <b>Enter</b> will be the selected trunk number.	5.3	5.3	5.3
Camera Up	Increments the current camera number, switching the new camera onto the current monitor.	5.4	5.4	5.4
Camera Down	Decrement the current camera number, switching the new camera onto the current monitor.	5.5	5.5	5.5
Extra camera control	Switches to the Camera Menu.	5.6	5.6	5.6

### Alarm Mode

Function	Description	Default (page, position)		
		Usr	Mgr	Eng
Accept	Accepts the current alarm*	1.1	1.1	1.1
Silence	Silences the local alarm warning	1.2	1.2	1.2
Cancel	Cancels the current alarm	1.3	1.3	1.3

\*this operation is only available when used in conjunction with a site controller.

Function	Description	Default (page, position)		
		Usr	Mgr	Eng
Change mux	Change the currently selected multiplexer. The next numeric entry followed by <b>Enter</b> will be the selected multiplexer number.	1.1	1.1	1.1
Spot monitor	Change the currently selected camera on the multiplexer spot output. The next numeric entry followed by <b>Enter</b> will be the selected camera.	1.2	1.2	1.2
Multi-screen monitor	Change the currently selected camera on the multiplexer multi-screen output. The next numeric entry followed by <b>Enter</b> will be the selected camera	1.3	1.3	1.3
Next multi-screen	Cycle to the next multi-screen display.	1.4	1.4	1.4
Live mode	Turn live mode on.	1.5	1.5	1.5
Decode mode	Turn decode mode on.	1.6	1.6	1.6
Encode mode	Turn encode mode on.	1.7	1.7	1.7
Change site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site.  Site 0 is always the operators local site.	1.8	1.8	1.8
Picture in picture	Select picture-in-picture mode.	1.9	1.9	1.9
Resume seq.	Resume the multiplexer camera sequence.	2.1	2.1	2.1
Hold seq.	Pause the multiplexer camera sequence.	2.2	2.2	2.2
Motion detect on	Turn motion detection on.	2.8	2.8	2.8
Motion detect off	Turn motion detection off.	2.9	2.9	2.9

**Vcr Mode**

Function	Description	Default (page, position)		
		Usr	Mgr	Eng
Change VCR	Change the currently selected VCR. The next numeric entry followed by <b>Enter</b> will be the selected multiplexer number.	1.1	1.1	1.1
Goto	Will request a time/date search. The next numeric entry, in the format ddmmmyyhhmmss, followed by <b>Enter</b> will be the requested search time	1.2	1.2	1.2
Pause	Sends a pause command.*	1.3	1.3	1.3
Rewind	Sends a rewind command.*	1.4	1.4	1.4
Play	Sends a play command.*	1.5	1.5	1.5
Fast Forward	Sends a fast forward command.*	1.6	1.6	1.6
Stop playback	Sends a command to stop playback only (does not effect the record status).	1.7	1.7	1.7
Stop	Sends a stop command.*	1.8	1.8	1.8
Record	Sends a record command.	1.9	1.9	1.9
Change site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site.  Site 0 is always the operators local site.	2.1	2.1	2.1
	* exact operation of VCR on receipt of these commands is dependant on both the VCR model and the current mode of operation of the VCR.			



## Relay Mode

Relay mode differs in that the position of the commands cannot be changed only the name of the Softkey

Default name	Description	Default (page, position)
All Relays	Energise or de-energise all relays. The option of relay on or off is given via softkeys	1.1
Change site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site.  Site 0 is always the operators local site.	1.2
Select Relay	Opens a numeric entry box. Typing the relay number followed by enter will open a new menu. Select whether the relay should be turned on or off.	1.3
Relay 1	Energise or de-energise relay 1. The option of relay on or off is given via softkeys	1.4
Relay 2	Energise or de-energise relay 2. The option of relay on or off is given via softkeys	1.5
Relay 3	Energise or de-energise relay 3. The option of relay on or off is given via softkeys	1.6
Relay 4	Energise or de-energise relay 4. The option of relay on or off is given via softkeys	1.7
Relay 5	Energise or de-energise relay 5. The option of relay on or off is given via softkeys	1.8
Relay 6	Energise or de-energise relay 6. The option of relay on or off is given via softkeys	1.9
Relay 7	Energise or de-energise relay 7. The option of relay on or off is given via softkeys	2.1
Relay 8	Energise or de-energise relay 8. The option of relay on or off is given via softkeys	2.2
Relay 9	Energise or de-energise relay 9. The option of relay on or off is given via softkeys	2.3
Relay 10	Energise or de-energise relay 10. The option of relay on or off is given via softkeys	2.4
Relay 11	Energise or de-energise relay 11. The option of relay on or off is given via softkeys	2.5
Relay 12	Energise or de-energise relay 12. The option of relay on or off is given via softkeys	2.6
Relay 13	Energise or de-energise relay 13. The option of relay on or off is given via softkeys	2.7
Relay 14	Energise or de-energise relay 14. The option of relay on or off is given via softkeys	2.8
Relay 15	Energise or de-energise relay 15. The option of relay on or off is given via softkeys	2.9
Relay 16	Energise or de-energise relay 16. The option of relay on or off is given via softkeys	3.1
Relay 17	Energise or de-energise relay 17. The option of relay on or off is given via softkeys	3.2
Relay 18	Energise or de-energise relay 18. The option of relay on or off is given via softkeys	3.3
Relay 19	Energise or de-energise relay 19. The option of relay on or off is given via softkeys	3.4
Relay 20	Energise or de-energise relay 20. The option of relay on or off is given via softkeys	3.5
Relay 21	Energise or de-energise relay 21. The option of relay on or off is given via softkeys	3.6
Relay 22	Energise or de-energise relay 22. The option of relay on or off is given via softkeys	3.7
Relay 23	Energise or de-energise relay 23. The option of relay on or off is given via softkeys	3.8
Relay 24	Energise or de-energise relay 24. The option of relay on or off is given via softkeys	3.9

Function	Description	Default (page, position)		
		Usr	Mgr	Eng
Camera Colour Mode	Allows the selection of camera colour mode – Colour, mono or auto. These options are displayed against softkeys.	1.1	1.1	1.1
Lock Camera	Locks the current camera to its current position.	1.2	1.2	1.2
Unlock Camera	Unlocks the current camera from its current position.	1.3	1.3	1.3
PWS	Momentary peak white suppression enabled on the current camera.	1.4	1.4	1.4
Privacy Config	Allows the selection of camera privacy zones – On or off These options are displayed against softkeys.		1.5	1.5

Privacy Config

Function	Description	Default (page, position)		
		Usr	Mgr	Eng
On	Turn privacy zone display on.		1.1	1.1
Off	Turn privacy zone display off.		1.2	1.2
Partial	Translucent privacy zone.			

Sequence Control Menu

No configuration can be done on this menu.

Default name	Description	Default (page, position)
Start	Starts a camera sequence running. The next numeric entry followed by <b>Enter</b> will be the selected sequence pattern. Starting sequences can be restricted by log in level.	1.1
Pause	Pause the sequence running on the currently selected monitor.	1.2
Resume	Resume the sequence paused on the currently selected monitor.	1.3
Back <	Step backwards through the sequence running on the currently selected monitor.	1.4
Forward >	Step forwards through the sequence running on the currently selected monitor.	1.6
Select Monitor	Selects the new user monitor. The next numeric entry followed by <b>Enter</b> will change the current monitor.  Pressing the <b>Enter</b> key without a number defaults the current monitor to the default user monitor configured in the setup menus.	1.9

**Timeout Override Menu**

No configuration can be done on this menu.

Default name	Description	Default (page, position)
Lamp	Over-rides the timeout operation on the current camera	1.1
Wiper	Over-rides the timeout operation on the current camera	1.3
Integr	Over-rides the timeout operation on the current camera	1.4
Aux 3	Over-rides the timeout operation on the current camera	1.6
Manual Iris	Over-rides the timeout operation on the current camera	1.7
Auto home	Over-rides the timeout operation on the current camera	1.9

**Patrol Setup Menu**

No configuration can be done on this menu. It will send a store patrol command to the current camera. The operator will be prompted for a series of preset, dwell and speed numbers, each number should be entered and followed with **Enter**

Default name	Description	Default (page, position)
Patrol		1.1
New point	Insert a new preset position into the patrol	1.2
Delete point	Delete a preset position from the patrol	1.3
Store	Store the currently defined patrol	1.4

## Log-on and Log-off Procedure

The ZVK-77D supports 49 users, each of which can be configured to belong to one of the 3 operator groups:

- User
- Manager
- Engineer

Operator control priority can be set on an individual user basis.

Use of an external joystick, e.g. for a left handed user, can be set on an individual user basis.

Menu configuration is by operator group.

The ZVK-77 comes with three default users already configured:

User Name	Operator Group	Password
Default User	User	1111
Default Manager	Manager	2222
Default Engineer	Engineer	3333

If all passwords codes with Engineering access are lost, users cannot be configured and the keyboard must be reset back to factory settings. Contact our technical support line for advice on this procedure.

### Log-on

Before the keyboard can be used an operator has to log-on by selecting their user name and entering a PIN. To log-on follow the procedure below.

1. Press the *Softkey* directly adjacent to the menu option, **Log on**.
2. Use the **Next** key to highlight your user name and press **Enter**.
3. Now enter your Password using the Numeric Keypad and press **Enter**.
4. You should now be Logged onto the keyboard. If the error message **Login Incorrect** appears, simply repeat steps 1 to 3.

If enabled the operator can be given 3 attempts to correctly login. If the operator fails then the keyboard must be powered on for 10 minutes before another logon can be attempted.

### Log-off

Logging-off the ZVK-77D keyboard is achieved from the Select Mode Menu. To get back to this menu it does not matter which menu you are currently in, simply press and hold down the Back key until the message:

Log off ?

[Enter] = Confirm  
[Clear] = Cancel

Every time you exit a menu you will hear a confirmation beep from the keyboard. Press the **Enter** key to log yourself off the ZVK-77D or press the **Clear** key to remain logged-on.

If you are already at the Select Mode Menu then simply press the **Log off Softkey**.

## Info Screen

The Info Screen displays information about this specific ZVK-77D.

This includes:

- The version of firmware eg. 2.6.0.0
- The network status,)
- The keyboard Module Access Code (MAC).

Version 2.6.1.0
MAC : 5
Network status :
Ok

If you request technical support you maybe asked for this information.

The Info Screen is accessed from the Select Mode Menu by pressing the *Softkey* directly adjacent to the menu option **Info Screen**.

## Network status

The network status reports the current status of communication between the keyboard and the controller.

- **OK**  
Communications is good
- **Not Polled**  
The ZVK-77D is not detecting any communications. This generally means a fault with the network receive (i.e. the keyboard cannot see polls from the controller).
- **Not Acknowledged**  
The ZVK-77D is not detecting enough polls to operate correctly. This generally means a fault with the network transmit (i.e. the controller cannot see the poll replies but the keyboard can see the network).

## Site and Classic Mode

The centre pane of the display is used in site and classic mode to display information about the currently selected camera.

Site (local)	Granted:1
Monitor 1	
Camera 8	<ul style="list-style-type: none"> <li>o Lamp</li> <li>o Wiper</li> <li>o Iris</li> <li>o Aux 1</li> <li>o Aux 3</li> </ul>
O ->	

The current site (not in classic mode), monitor and camera are displayed on the left hand side.

On the right are indicators for the status of receiver functions:

- Lamp
- Wiper
- Iris manual
- Aux 1 on
- Aux 2 on
- Aux 3 on

This status information is only displayed once control of the camera has been granted.

The bottom left of the pane is used to indicate PTZF operation. An arrow is drawn showing the approximate direction of pan and tilt. The shape next to the arrow indicates zoom (two hollow circles), focus (hollow star) or iris (hollow circle and a filled circle)

The top right of the pane displays remote trunk status:

- **Granted**  
Granted indicates that control of the trunk has been given to this operator. The number displayed indicates the trunk number.
- **No trunk**  
No trunk indicates that physically there is no connection between the two sites.
- **Denied**  
Denied indicates that there are no free trunks available.
- **<Blank>**  
Selection is from the local site.

### **Selecting sites, cameras and monitors**

As CCTV systems have grown both in size and complexity it has become a requirement to partition cameras into areas. These areas are often based on geographical location, Meyertech refer to these as SITES.

Each SITE has its own independent range of cameras

The ZVK-77D plays a role in this by allowing the operator to select sites and cameras as simply as possible.

#### **To select a Monitor.**

01. Press the *Softkey* directly adjacent to the menu option, **Select Monitor**.
02. Now enter a monitor in the range 1 – 999 using the Numeric Keypad followed by **Enter**.

This operation does not have to be done prior to every switch – it is only required when you wish to change which monitor you want to control.

#### **To select a Site.**

01. Press the *Softkey* directly adjacent to the menu option, **Select Site**.
02. Now enter a site in the range 0 – 255 using the Numeric Keypad followed by **Enter**.
03. Input a camera in the range 0 – 9999 using the Numeric Keypad followed by **Enter**.

Note that Site 0 is always the site you are at, it is your local site and is equivalent to operating the keyboard in Classic mode.

This operation does not have to be done prior to every switch – it is only required when you wish to change which site you want to view a camera from.

Trunk selection is automatic on selecting a site.

#### **To select a Camera.**

In the keyboards idle state (ie you are not in the process of entering a command) all numeric entries on the keyboard are assumed to be cameras selections.

01. Enter a camera in the range 0 – 9999 using the Numeric Keypad followed by **Enter**.

#### **To select an adjacent camera**

If the adjacent cameras are numbered sequentially, they can be quickly selected by increasing and decreasing the current camera number.

01. If the menu options, **Camera Up** and **Camera Down** are not currently displayed, use the **Next** key to find them.
02. Press the **Camera Up** key to select the next camera number, or **Camera Down** to select the previous.

Images displayed on your spot monitor can be copied directly to a nominated monitor designated the ***Relay Monitor***. This is a common requirement in town and city centre schemes.

01. If the menu option, ***Relay Monitor*** is not currently displayed, use the ***Next*** key to find it.
02. Press the Softkey directly adjacent to the menu option, ***Relay Monitor***

### **To select a Trunk**

Trunks are video trunks linking one site to another site. Both sites would normally incorporate a video matrix with a number of the remote sites video outputs being designated trunks. At the local site these trunks connect as inputs into the local video matrix.

The select Trunk function is only used to select a specific trunk. Normally trunk selection is done automatically by the ZoneVu system when the operator selects a remote site.

01. Press the Softkey directly adjacent to the menu option, ***Select Trunk***
02. Now enter a TRUNK in the range 1 – 999 using the Numeric Keypad followed by ***Enter***

### **To select the Next Trunk**

***Next Trunk*** operates in a similar manner to ***Select Trunk***. The difference being that ***Next Trunk*** selects the next available trunk rather than a specific trunk.

01. Press the Softkey directly adjacent to the menu option, ***Next Trunk***.

## Controlling cameras

Camera functions such as Pan, Tilt, Zoom and Focus can be controlled via the proportional joystick and other functions including **Lamp**, **Wash**, **Wipe** controlled using the Softkeys directly adjacent to each of the menu options.

Camera control is automatically requested whenever you select or try to operate any of the camera functions described above. Control of a camera is granted to a user based on Meyertech's hierachal camera control priority, the rules of which are:

01. Only one operator can be in control of any particular camera at any one time.
02. Control of a camera is granted based on the priority level of the requesting operator. The priority level is a configuration option. Level settings are in the range 1-9, nine being the highest level of priority available.
03. If the camera requested is not currently under control by any other user, control will be granted to the requesting user.
04. If the camera is currently being controlled by another user, and both users have equal priority levels, control will be denied to the requesting operator.
05. If the camera is currently being controlled by another user, and the requesting user has a lower level of priority than the current user, control will be denied to the requesting operator.
06. If the camera is currently being controlled by another user, and the requesting user has a higher level of priority than the current user, control will be granted to the requesting operator and the current user will automatically be forced to submit control.

Note: when controlling cameras on remote sites, the priority level of the site is used rather than those of the operators.

### To Release Control of a camera.

Camera control is automatically released every time you select a new camera, but on occasion you may want to release control of the camera to another user whilst maintaining the picture on your spot monitor.

01. Press the *Softkey* directly adjacent to the menu option, **Release Control**.

### To select Camera Presets or Camera Home position.

Camera presets are 'preset' camera positions of Pan, Tilt, Zoom and Focus which the camera automatically returns to when requested by either the user or ZoneVu system. Home is a special preset position usually set by the system administrator as the position the camera should be at when not being controlled by a user.

To select the Home position:

01. Press the *Softkey* directly adjacent to the menu option, **Home**.
02. If the menu option, **Home** is not currently displayed, use the **Next** key to find it.

To select a Preset position:

01. Press the *Softkey* directly adjacent to the menu options **Preset 1** to **Preset 3**. The first three presets are directly available from the menu.



02. If the preset number you require is higher than three, first press the Softkey directly adjacent to the menu option, **Select Preset**.

03. Now enter a PRESET in the range 0 – 999 using the Numeric Keypad followed by **Enter**

### **To store a Camera Preset**

01. Press the Softkey directly adjacent to the menu option, **Store Preset**
02. Now enter a PRESET in the range 0 – 999 using the Numeric Keypad followed by **Enter**

### **To select a Camera Preset Patrol**

Placing a camera into a Preset Patrol means the camera will continuously execute a series of Camera Presets over a set period of time. Preset Patrols are generally configured and stored by each particular camera in the system. Various types of camera Preset Patrols exist eg. Random, Ordered, Mimic. Suffice to say the task of the ZVK-77D is just to select them.

01. Press the Softkey directly adjacent to the menu option, **Preset Patrol**.
02. Now enter a PATROL in the range 0 – 999 using the Numeric Keypad followed by **Enter**

### **To store a Camera Patrol**

01. Press the Softkey directly adjacent to the menu option, **Store Patrol**
02. Now enter a PATROL in the range 0 – 999 using the Numeric Keypad followed by **Enter**
03. Follow the on-screen menu for entering details of each position within the patrol.

Note that the details of the Patrol are not stored on the keyboard and reviewing an existing patrol is not possible.

### **Patrol Numbering**

Firmware version 2.0.0.0 onwards

<b>Selection</b>	<b>Result</b>
Random patrol	Start random patrol
Recall Patrol 1	Start first ordered patrol
Store Patrol 1	Store first ordered patrol
Store / Recall Patrol x	Store / Recall Patrol x

Firmware version 1.9.0.0 – 1.11.0.0

<b>Selection</b>	<b>Result</b>
Random patrol	Start random patrol
Recall Patrol 1	Start first ordered patrol
Store Patrol 1	No effect
Recall Patrol 2	Start ordered patrol 2
Store Patrol 2	Store first ordered patrol
Store / Recall Patrol x	Recall patrol x, Store patrol x - 1.

## Alarm Mode

Alarm mode allows alarms to be managed by the operator using just the ZVK-77 keyboard.

As alarms are reported they appear in the alarm queue displayed in the Control Pane.

Three operations are possible on each alarm:

- *Accept the alarm*
- *Cancel the alarm*
- *Silence the alarm*

Use the **Previous** and **Next** keys to move through the entries in the alarm stack.

## Controlling Peripherals

### **Mux Mode**

Mux mode allows the user to take control of Multiplexers connected to the ZoneVu system.

01. Press the Softkey directly adjacent to the menu option, **Mux Mode** to enter the Multiplexer Control menu.

Once in the Multiplexer Control Menu you can:

Select a multiplexer to control

01. Press the Softkey directly adjacent to the menu option, **Change Mux**.
02. Now enter a MUX in the range 1 – 999 using the Numeric Keypad followed by **Enter**

Select a multiplexer camera input to the multiplexer spot output, normally referred to as the analogue output.

01. Press the Softkey directly adjacent to the menu option, **Spot Monitor**.
02. Now enter a CAMERA in the range 1 – 999 using the Numeric Keypad followed by **Enter**

Select a multiplexer camera input to the multiplexer MSC output, normally referred to as the digital output.

01. Press the Softkey directly adjacent to the menu option, **Multi-screen monitor**
02. Now enter a CAMERA in the range 1 – 999 using the Numeric Keypad followed by **Enter**

Step through the various multiplexer multi-screens

01. Press the Softkey directly adjacent to the menu option, **Next multi-screen** to select the next MSC.

Select Multiplexer modes of operation Live mode, Decode mode and Encode mode.

01. Press the Softkey directly adjacent to the menu options, **Live Mode**, **Decode Mode** and **Encode Mode**.

You can also control Multiplexers on other sites by using the **Change Site** function.

01. Press the Softkey directly adjacent to the menu option, **Change Site**.
02. Now enter a SITE in the range 0 – 999 using the Numeric Keypad followed by **Enter**.

Start and stop a sequence

01. Press the Softkey directly adjacent to the menu options, **Resume seq.** and **Hold seq.**

Control the motion detection feature

01. Press the Softkey directly adjacent to the menu options, **Motion detect on** and **Motion detect off**.

Note that no site number is displayed when accessing local multiplexers.

## DVR/VCR Mode

VCR mode allows the user to take control of DVRs and VCRs connected to the ZoneVu system.

01. Press the Softkey directly adjacent to the menu option, **VCR Mode** to enter the VCR Control menu.

Once in the VCR Control Menu you can:

Select a VCR to control

- Press the Softkey directly adjacent to the menu option, **Change VCR**.
- Now enter a VCR in the range 1 – 999 using the Numeric Keypad followed by **Enter**.

Goto the specific Time/date of a recording

- Press the softkey directly adjacent to the menu option, **Goto**
- Now Enter as Time/Date in the Format ddmmmyyhhmmss followed by **Enter**,

Play a video tape.

- Press the Softkey directly adjacent to the menu option, **Play**.

Stop a video tape playing and / or recording.

- Press the Softkey directly adjacent to the menu option, **Stop**

Stop a device from playing only

- Press the softkey directly adjacent to the menu option, **Stop Playback**

Pause a video tape which is playing.

- Press the Softkey directly adjacent to the menu option, **Pause**.

Rewind a video tape.

- Press the Softkey directly adjacent to the menu option, **Rewind**.

Forward a video tape.

- Press the Softkey directly adjacent to the menu option, **Forward**

Record a video tape.

- Press the Softkey directly adjacent to the menu option, **Record**

You can also control VCR's on other sites by using the **Change Site** function.

- Press the Softkey directly adjacent to the menu option, **Change Site**.
- Now enter a SITE in the range 0 – 999 using the Numeric Keypad followed by **Enter**.

Note that no site number is displayed when accessing Local VCR's.

### VCR Status

The **Fast Forward** softkey will be automatically renamed to **Search Forward** or **Frame Forward** depending on the current VCR status.

The **Fast Rewind** softkey will be automatically renamed to **Search Rewind** or **Frame Rewind** depending on the current VCR status.

ZoneVu

## Configuration

### Program / Setup

The ZVK-77D keyboard has many user features which maybe configured as well as the usual system engineering parameters which, are normally configured by the engineer during commissioning. To access the Configuration menus

01. Press the Softkey directly adjacent to the menu option, **Program / Setup**

Once in the Configuration menu you will find options to program other ZoneVu equipment including camera control receivers and video matrices, other manufacturers cameras and domes as well as the ZVK-77D keyboard.

### Keyboard Backup

The ZVK-77 keyboard can be backed up using Mpower. This facility is available through a site controller or ZSC-250-xx meaning that all the keyboards on a system can be backed up (one at a time) from a single point. It may also be achieved by using an RS232 connection to a keyboard, which is in standalone mode.

### Keyboard setup

Within the keyboard setup, the option exists to change the Softkey text on a number of items. In these cases up to 4 lines of text each with a maximum of 7 characters can be entered. Options are present for special characters including new line.

- **Network Setup**

	<b>Description</b>	<b>Default</b>
MAC address	The module access code is the ZoneVu network address of ZVK-77D. Each item of equipment on the network requires a unique address to function correctly.	5
LH MAC address	The LH module access code is the ZoneVu network address of ZVK-66 if the ZVK-77D is in Left Handed User Mode. See section 'Setting up Left Handed User Compatibility'	6
Line Term.	Line termination relates to the RS422 network. On a RS422 network system one item of equipment should be terminated into 120R impedance, normally the last item of equipment on the network. Note that only one item of equipment should be terminated	Off
Mode	<b>Stand-alone</b> , when there is no video matrix or site controller present on the system. This mode gives you the ability to control cameras directly from the ZVK-77D.  <b>Network</b> . In this mode the keyboard should be connected to either a ZoneVu video matrix or a site controller  <b>PC Mode</b> is a special non-ZoneVu mode of operation use to connect to a third party control system. In this instance the RS232 port is utilised in place of the ZoneVu port.	Network
Comms type	The communications format can be set as either 2-wire or 4-wire	4-wire
Baud rate	The baud rate for the communications: 9600,19200,38400	9600

- **Joystick Setup**

The joystick employed in the ZVK-77D is a fully proportional X,Y,Z joystick providing the operator with independent variable speed control of Pan, Tilt, Zoom, Focus and Iris functions.

	<b>Description</b>	<b>Default</b>
Centre stick	Calibrate the joystick	
Speed mode	Basic or Advance – Change this only following advise from Meyertech Technical Support	Advance
Twist Sensitivity	Standard (Std) or Low. Low sensitivity increases the amount the joystick must be twisted before the lens starts to move.	Std



The joystick is a fully proportional type and, as such may require re-calibrating from time to time. To calibrate the joystick.

1. Press the Softkey directly adjacent to the menu option, Centre stick. A pop-up window will say 'Push any key to begin' Press any key and follow the menu instructions.
2. You will be asked in sequence to move the joystick fully right, left, up, down followed by Zoom in and out via the joystick twist grip.
3. Finally you will be asked to release the joystick to determine its centre position.

**Note: Speed mode**

Since the original ZoneVu system was introduced over 10 years ago development of Meyertech products has continued at a pace to bringing you the latest technology and ideas. To manage this technology effectively Meyertech have always promoted the concept of backward compatibility, ensuring new products work when installed into older systems. This concept is vital to customers who do not have the budget to entirely replace their system every time they want to take advantage of some new technology. Speed mode is an example of how Meyertech are managing that concept. The Basic speed mode option is to maintain compatibility with older and existing ZoneVu products eg ZVR-510 receiver. The Advance speed mode is an enhanced version of the Basic providing the operator with improved speed control. Select this only following advise from Meyertech Technical Support

- **Edit zonal switch**

Zonal switches is a name given to multiple switches that occur concurrently across a specified range of monitors

	<b>Description</b>	<b>Default</b>
Name	The name given to this zonal switch	Zone <number>
New switch	Camera and monitor required	
Delete switch	Delete the current switch	
Store	Store the current configuration and exit	
Erase zonal switch	Delete the current configuration and exit	

- **Edit monitor setup**

The keyboard can be configured to bar access to certain monitors.

The keyboard can also be configured to map specified monitors to different monitor numbers.

	<b>Description</b>
New monitor map	Create a new monitor map. Enter the original monitor number followed by the new monitor number
Bar monitor	Bar this keyboard from accessing this monitor
Store	Store the current configuration and exit
Delete monitor setup	Delete the current configuration and exit
Erase all monitor setup	Erase all the monitor maps and bars.
Page up	Move up through the list of monitors
Page down	Move down through the list of monitors

- **Login Account Setup**

Operators of the ZVK-77D are required to log-on and log-off the keyboard to operate it. There are three levels of operator, User, Manager and Engineer. Each level can have a set of access rights configured to suit. New operators can be easily added through the Login account setup menu.

	<b>Description</b>	<b>Default</b>
Insert new user	Enter the operators name using the alphanumeric keypad and press <b>Enter</b> . The menu will automatically take you to the Edit user menu.	
Edit user	The Edit user menu is displayed (see below)	



Delete user	Delete the currently highlighted user	
Login lockout	If enabled the operator gets 3 attempts to correctly login. If the operator fails then the keyboard must be powered on for 10 minutes before another logon can be attempted.	Off

[Edit user menu](#)

	Description	Default
Edit login name	Edit the new login name. 20 chars. max.	
Access level	The access level of the new login - user, manager or engineer. A user can not configure a user level higher than their own.	User
Priority	The priority level of the new login – 1 to 9	1
Password	The password for the user. Up to 20 chars, numbers, letters or symbols.	9999
LH Mode	Left Handed Mode – On/Off See section 'Setting up Left Handed User Compatibility'	Off

- User Interface Setup**

	Description	Default
Screen colour	The display colour. Either <b>black</b> screen with white text, or <b>white</b> screen with black text.	White
Screen timeout	A screen timeout can be selected. If no user activity is detected then the screen will blank after the specified number of seconds. Setting a time of 0 seconds disables the screen timeout.	300 s

- Custom Menu Setup**

Custom menu setup is an option, which configures the look and feel of each operational menu by login level type ie User, Manager or Engineer. This is a useful feature as it allows both the access and priority to be set by operator type. See the **Softkeys** section of this document for the default configuration of the different modes.

	Description	Default
Login level	Select the required operator level – user, manager or engineer	User
Insert new item	Insert a new command, at the point before the currently highlighted command	
Insert macro	Insert a previously defined macro. The macro is appended at the end of the list	
Move up	Move the highlight bar up through the command list.	
Move down	Move the highlight bar down through the command list.	
Delete item	Delete the currently highlighted command.	
Revert to factory setting	Reset the current menu to its default setting.	

Each page of the menu can hold 9 commands. Blanks can be inserted instead of commands to assist in the functional partitioning of the commands.

- Misc. options**

General configuration settings that can help tailor a keyboard to a specific installation.

	Description	Default
Periph. Type	Early ZoneVu peripheral drivers used a different protocol. Select this only following advise from Meyertech Technical Support	New
Nudge mode	Controls the operation of the nudge keys. These keys generate either zoom or focus nudge commands. Can be set to either <b>Inverse J-stick</b> – nudge key opposite of joystick twist action – or – <b>As J-stick</b> – nudge key same as joystick twist action.	Inverse J-stick
Spot monitor	The default monitor that the keyboard uses for camera switches. The keyboard will use this monitor on power-up and if the <b>Select Monitor</b> Softkey is pressed followed by <b>Enter</b> (ie no monitor number selected).	1
Relay monitor	The monitor number used in the <b>Relay monitor</b> copy function.	1
Spot vcr	The VCR number which is used when the <b>Record</b> button is pressed (in all modes except VCR mode).	1



IO base address	The MAC address used by the 1 <sup>st</sup> ZVS-IOM8 unit on the system. Do not modify this setting without referring to Meyertech Technical Support.	12
Mode	Can be set to either <b>Site mode</b> or <b>Classic mode</b> . If set to <b>Classic mode</b> will not allow the operator access to <b>Site mode</b> , but will replace it with <b>Classic mode</b> – which uses the same menus without the ability to access remote sites.	Site mode

- **Seq. access**

Controls operator access to sequences.

	<b>Description</b>	<b>Default</b>
Edit access level:	Select the required operator level – user, manager or engineer – for controlling the currently highlighted sequence number.	User

- **Relay Config**

The ZVK-77 will control the ZVS-IOM8 units via the **Relay Mode**. The text description for each relay on the ZVS-IOM8 can be configured.

	<b>Description</b>	<b>Default</b>
Relay 1		Relay 1
Relay 2		Relay 2
Relay 3		Relay 3
Relay 4		Relay 4
Relay 5		Relay 5
Relay 6		Relay 6
Relay 7		Relay 7
Relay 8		Relay 8
Relay 9		Relay 9
Relay 10		Relay 10
Relay 11		Relay 11
Relay 12		Relay 12
Relay 13		Relay 13
Relay 14		Relay 14
Relay 15		Relay 15
Relay 16		Relay 16

- **Audio Setting**

The audio aspects of the keyboard can be configured

	<b>Description</b>	<b>Default</b>
Volume	Changes the sound of the internal buzzer to be more or less noticeable	Quiet
PCI mode alarm	When set to <b>Off</b> alarms will not be enunciated whilst in PCI mode	On

- **Revert to Factory Settings**

Use this option to reset all configuration on the keyboard to the factory default values. A dialog box will be displayed asking you to confirm using the **Enter** key, or cancel with the **Clear** key.

## Camera setup

This section of the Program / Setup allows the operator to remotely setup a range of serially controlled cameras and 3<sup>rd</sup> party domes.

This area of the ZVK-77 is in continual development as new cameras and domes come onto the market so contact Meyertech Technical Support if details of your 3<sup>rd</sup> party equipment are not covered in this release of the document.

For more information on any of the commands, see the associated Meyertech Embedded Firmware Driver (EFD) manual

	<b>Description</b>
JVC menu ZVR x30	Used to configure JVC cameras through a ZVR-x30 receiver or a JVC dome via an EFD-JVC. The <b>JVC Setup menu</b> will be displayed.
JVC menu ZVR x10	Used to configure JVC cameras through a ZVR-x10 receiver. The <b>JVC-1360 Setup menu</b> will be displayed.
Panasonic menu	Used to configure Panasonic cameras through a ZVR-x30 receiver or a Panasonic dome via an EFD-Panasonic. The <b>Panasonic Setup menu</b> will be displayed.
Bosch menu	Used to configure Bosch cameras through a ZVR-x30 receiver. The <b>Bosch Setup menu</b> will be displayed.
General	The <b>generic camera setup menu</b> is displayed.
Change monitor	Selects the new user monitor. The next numeric entry followed by <b>Enter</b> will change the current monitor. Pressing the <b>Enter</b> key without a number defaults the current monitor to the default spot monitor configured in the setup menus.
Select camera	Selects the new current camera. The next numeric entry followed by <b>Enter</b> will change the current camera.
Select site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site. Site 0 is always the operators local site.

- **JVC Setup menu**

	<b>Description</b>
Menu	Menu start command
Left	Menu navigation command
Up	Menu navigation command
Select	Menu select command
Down	Menu navigation command
Right	Menu navigation command
Last menu	Return to last menu
Tele	Zoom command
Wide	Zoom command
Freeze frame	Picture freeze command
Un-freeze frame	Picture freeze command
Store scene	Scene selection command
Recall scene	Scene selection command

- **JVC-1360 Setup menu**

	<b>Description</b>
Menu	Menu start command
Left	Menu navigation command
Up	Menu navigation command
Select	Menu select command
Down	Menu navigation command
Right	Menu navigation command
Last menu	Return to last menu
Freeze frame	Picture freeze command
Un-freeze frame	Picture freeze command
Store scene	Scene selection command



- **Panasonic Setup menu**

	<b>Description</b>
Menu On	Menu start command
Menu Off	Menu exit command
Left	Menu navigation command
Up	Menu navigation command
Set 1	Menu select command
Down	Menu navigation command
Right	Menu navigation command
Set 2	Menu select command
Menu*	Menu start command. Can also access additional Panasonic sub menus.

- **Bosch Setup menu**

	<b>Description</b>
Config Menu	Start main configuration menu (same as Select key)
Install Menu	Start installation menu
Left	Menu navigation command
Up	Menu navigation command
Select	Menu select command (same as Config Menu key)
Down	Menu navigation command
Right	Menu navigation command
Recall scene	Scene selection command

- **Generic Camera Setup menu**

	<b>Description</b>
Enable digital zoom	Digital zoom enable
Disable digital zoom	Digital zoom disable
Toggle auto-flip	Auto flip enable toggle command
Special	Generates a function command. The next numeric entry followed by <b>Enter</b> will be the selected function number that is sent to the camera / dome.

## ZVR Config

The ZVK-77 fully supports the configuration of the Meyertech ZoneVu range of receivers.

	<b>Description</b>	<b>Default</b>
Type	Select the type of ZoneVu receiver to configure. ZVR-500 (obsolete), ZVR-x10 or ZVR-x30.	ZVR-x30
Start config	Start the configuration. The receiver at this point will display its OSD menu	
Change monitor	Selects the new user monitor. The next numeric entry followed by <b>Enter</b> will change the current monitor. Pressing the <b>Enter</b> key without a number defaults the current monitor to the default spot monitor configured in the setup menus.	
Select camera	Selects the new current camera. The next numeric entry followed by <b>Enter</b> will change the current camera.	
Select site	Selects the new current site. The next numeric entry followed by <b>Enter</b> will change the current site. Site 0 is always the operators local site.	
Toggle pot display	The receiver will display its potentiometer feedback values on the OSD to assist in installation.	

Note:

On starting configuration a different menu will be displayed on the keyboard depending on the type of receiver being configured.

ZVR-x30 receivers use softkeys or joystick for menu navigation, and numeric keys for number entry.

ZVR-x10 receivers have a range of editing keys available, as well as the numeric keypad, clear & enter keys and a text entry screen. Menu navigation is done using the joystick.

ZVR-x00 receivers use single character, or number selection from the numeric keypad, followed by enter to navigate the menu. Joystick movement is enabled in some parts of the menu by the Home key.

## Matrix Config

The ZVK-77 fully supports the configuration of the Meyertech series 2 and series 328 range of video matrices.

	<b>Description</b>
Enter text	Select to enter text
Down	Menu navigation
Enter	Menu selection

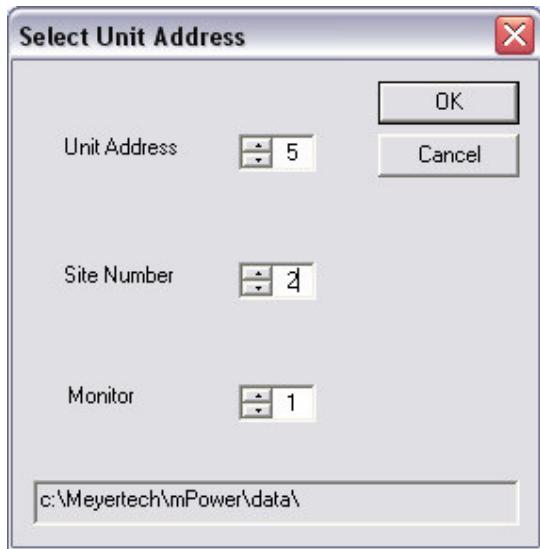
The numeric keys are also used for number entry.

On entering this menu the matrix will automatically go into configuration mode and display a menu on its OSD.

## Configuration Backup

Using Meyertech's configuration and backing up tool, Mpower, it is possible to backup all the configuration on the ZVK-77 keyboard. This may be done point to point (connecting your Mpower PC to the keyboards RS232 port) or can be done on a system by connecting to a ZSC-1000 (PC2 port), ZSC-250 or ZSC-250-IP. The latter method has the advantage of being able to backup / restore your keyboards from a single location. It is not possible to backup keyboards on a remote site.

First, select the keyboard you wish to configure



### Unit Address

This is the MAC address of the device you wish to configure / backup

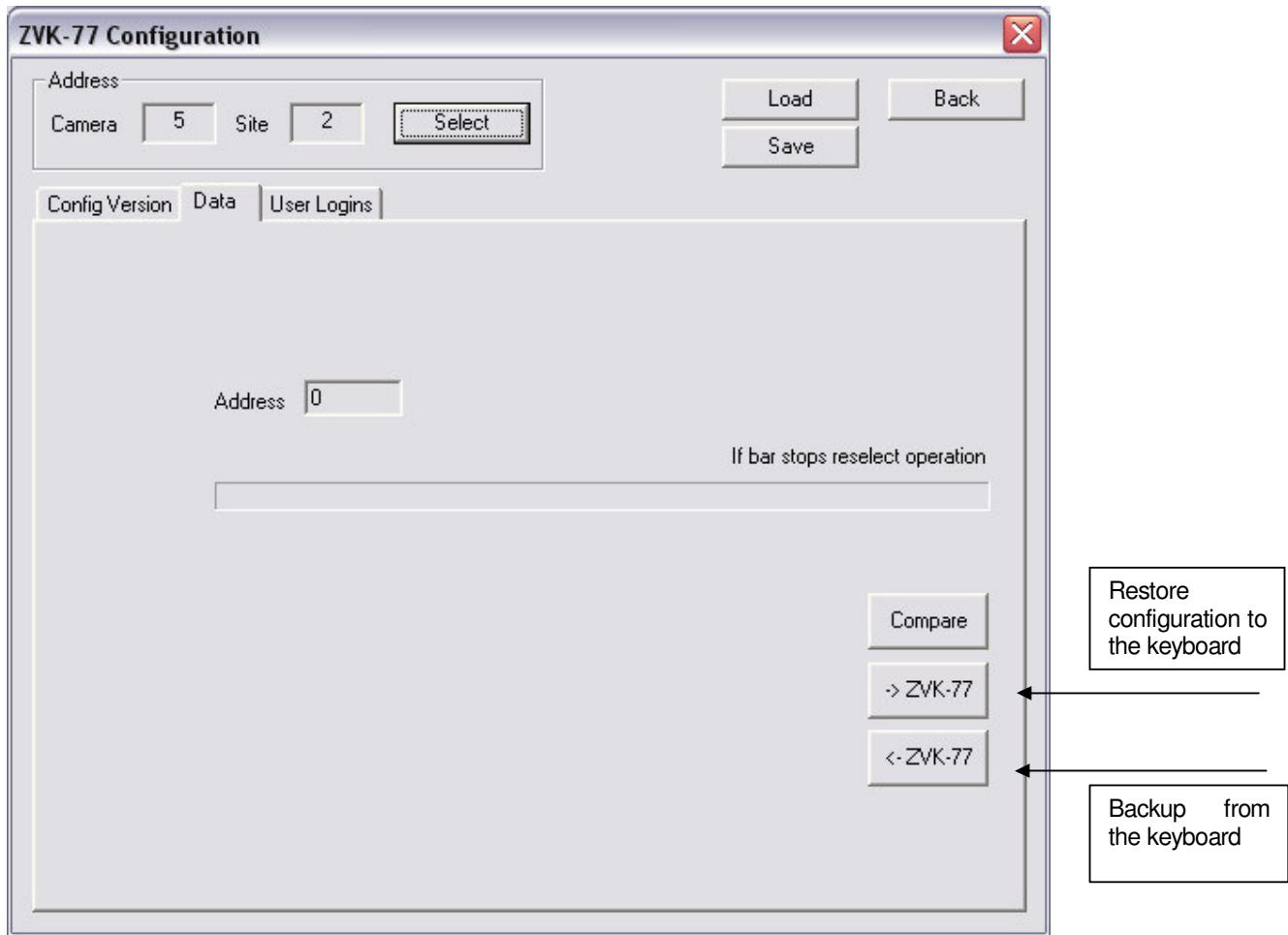
### Site Number

The site number that the keyboard is on. This is only required when configuration is carried out through a ZSC-250 / ZSC-250-IP, otherwise 0 may be used.

### Monitor Number

Not used.

## Backup



### Backup configuration

Press this button to backup the configuration from the keyboard. The blue bar will indicate the progress of the backup. If this bar stops moving please press the backup button and the backup will continue. Press the save button to save the configuration (refer to the Mpower manual on how to select where you save your configuration to).

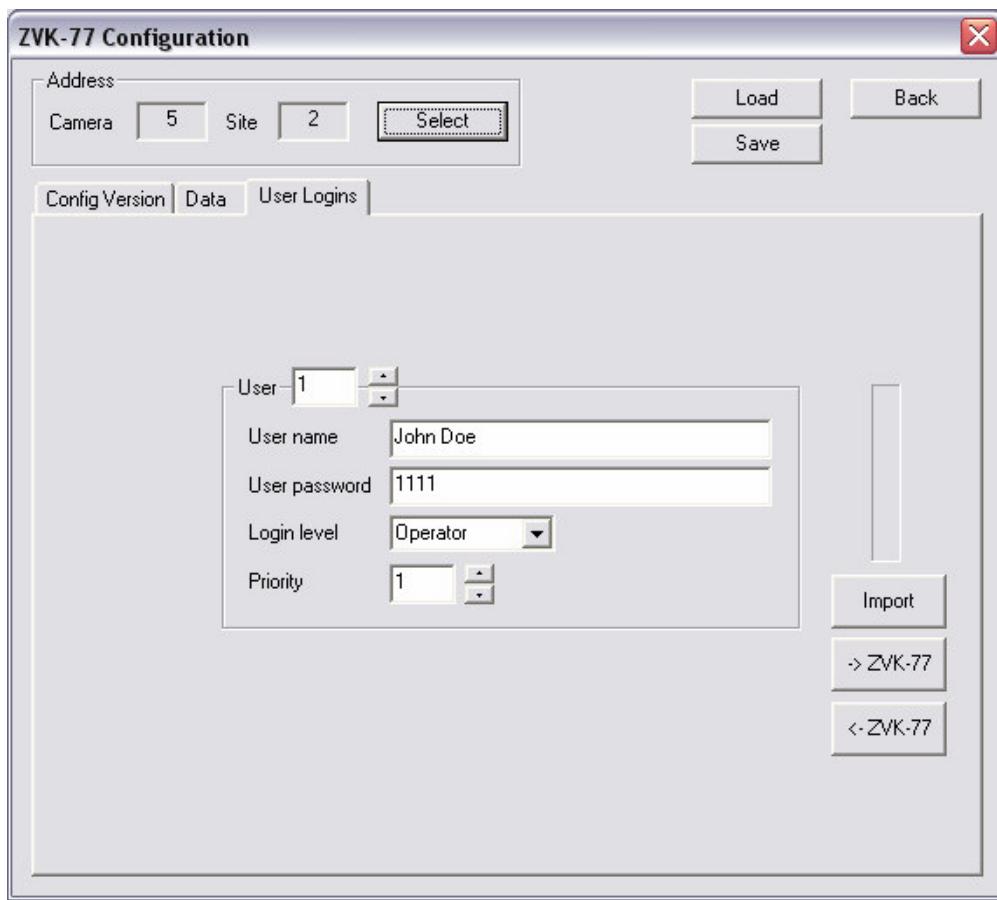
### Restore configuration

Press load to load the configuration into Mpower (refer to the Mpower manual to see how to select the files you wish to restore). Press this button to restore the configuration to the keyboard. The blue bar will indicate the progress of the restoration. If this bar stops moving please press the restore button again and the restoration will continue.

### Compare configuration

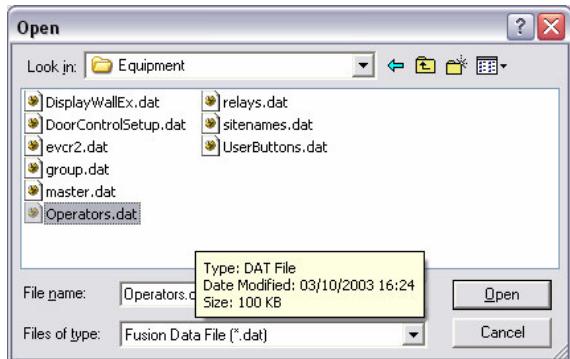
After loading in some configuration, clicking on this button uploads the configuration from the keyboard, comparing each 'block' as it goes.

## Fusion User Synchronising



### Importing The User List

Press this button to import the Fusion user list into Mpower. Select the operator.dat file you wish to import (The default path is c:\meyertech\fusion\equipment).



Once the list is imported it can be reviewed in Mpower. It is not possible to export the list from Mpower back to Fusion.

Once you have reviewed the user list it can be sent to the keyboard by pressing the “-> ZVK-77” button.

## Setting up Left Handed User Compatibility

### User Configuration

A user is setup to be left handed via the Login account setup menu, there is a button named LH mode, this should be set to On for Left Handed Mode.

### Setting up the ZVK-66 MAC address and linking it to the correct ZVK-77

The MAC address of the ZVK-66 keyboard is setup via the Network Setup menu, there is button named LH Mac address. This should be set to any available MAC address in the range 1-32.

To link the ZVK-66 to the ZVK-77D, the ZVK-77D must be in the Network Setup menu, the ZVK-66 is then put into configuration mode. When it has a valid network connection a message will appear on the screen of the ZVK-77 asking whether or not you want to link to the ZVK-66. Press Enter to confirm.

The ZVK-66 MAC address will then be configured as the LH Mac address on the ZVK-77D.

### Operation

When the ZVK-77D is in left handed user mode, the joystick on the ZVK-77D will be disabled and cannot be used to send telemetry. Telemetry is now sent from the joystick on the ZVK-66.

### Notes:

The Nudge feature is limited to control focus near/far only in LH mode

Left Handed Mode is not compatible with Receiver configuration.

All other ZVK-77D functionality is the same as standard configuration.

## Safety Precautions

1. Carefully read this Product Manual prior to commencing installation and configuration.
2. Before working on this product power it down and remove the power leads. Removing panel's modules or PCB's may cause damage to the product and present an electric shock and fire hazard.
3. To reduce the risk of electric shock and fire hazard do not operate this product with panels or covers removed.
4. Do not install or operate the product near water.
5. Do not install or operate this equipment outdoors.
6. If work is carried out on the product with panels and covers removed ensure full electrostatic handling procedures are adhered to.
7. Louvers and openings are provided in the product enclosures for ventilation purposes to protect it from overheating. Under no circumstances block or cover these openings.
8. Ensure the product is operated in a suitably temperature controlled environment within the specification limits.
9. Do not operate the product in humidity greater than 90%.
10. Do not drop objects of any kind through the product louvers and openings. This may cause electric shock and fire hazard and product malfunction.
11. Avoid liquid spillages on the product. This may cause electric shock and fire hazard as well as product malfunction.
12. Never attempt to service this product yourself. This product contains no serviceable parts Refer all servicing requirements to the Meyertech Service Centre or appointed Meyertech Service Agent
13. Do not operate this product if
  - 13.1. Any product power leads are damaged.
  - 13.2. If the product has been exposed to rain.
  - 13.3. If the product has been dropped or the enclosure has been damaged.
  - 13.4. If liquid has been spilt on the product.
  - 13.5. If the appliance has malfunctioned or is not operating to its functional specification.
  - 13.6. If the products cooling fans fail to operate.
14. This product must only be operated with the power supply provided or if supplied without a power supply, by the type of power source indicated in the specification.
15. Follow all warnings and instructions marked on the product and in this manual.
16. To clean the enclosure of the product use a cloth. Do not use liquid solvent-based cleaners.
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## Maintenance

The ZVK-77 requires no Planned Preventive Maintenance periods (PPM's) as it is mainly solid state in design.

The ZVK-77 contains no serviceable parts and should be returned to our Service Centre in Scunthorpe for repair or replacement under warranty. Any repairs, attempted repairs or replaced components not carried out by the Meyertech Service Centre will void all Meyertech warranties and liabilities.

If your ZVK-77 has to be returned to our Service Centre please follow the returns procedure below, otherwise delays may be incurred in returning or replacing the ZVK-77.

### Returns Procedure

Prior to returning your ZVK-77.

1. Contact our Service Centre by phone on 01724 278833 or by email [support@meyertech.co.uk](mailto:support@meyertech.co.uk) for a Goods Return Number.
2. The GRN will be logged by our staff along with the reported problem.
3. Pack the ZVK-77 into the original packing it was delivered in. Failure to do so means the unit may incur further damage in transit, which Meyertech cannot be responsible for.
4. Organise delivery of the ZVK-77 back to our Service Centre in Scunthorpe. Use a reputable carrier, as again Meyertech cannot accept liability for loss of goods in-transit.
5. On receiving the ZVK-77 our staff will, after initial examination advise of the course of action we intend to take.
  - a. Repair the ZVK-77 under warranty. The ZVK-77 will be repaired and returned to you free of charge.
  - b. Replace the ZVK-77 under warranty. The ZVK-77 will be repaired and returned to you free of charge.
  - c. Repair the ZVK-77 at a quoted cost. An official purchase order to cover the cost and return of the product will be required prior to commencement of repair.
  - d. Advise you that the ZVK-77 is not repairable. You can then decide to have the product returned to you at the standard delivery charge or we can dispose of the product free of charge.

**Meyertech Service Centre  
Unit 4E Queensway Business Centre  
Dunlop Way  
Scunthorpe  
DN16 3RN**

**Tel: 01724 278833  
Fax: 01724 289099**

## Disposal

There are no additional requirements beyond safe working practice in the decommissioning of the Meyertech ZVK-77.

However the ZVK-77 contains printed circuit boards populated with electronic components. The whole unit must be returned to **Meyertech Service Centre** for final disposal. Please follow the normal returns procedure.



**Meyertech Limited** is a member of the CCTV User Group.

## Support

Meyertech offer comprehensive levels of support during the product's warranty period. Our support team will be happy to help with any problem you may experience relating to the installation or operation of the ZVK-77D

1. Telephone support (+44(0)1724 278833 ) which is available during normal office hours 9AM – 5PM Monday to Friday excluding Bank holidays. This support is free of charge.
2. Email support. Available 24 hours a day. Our normal response to emails is next working day. This support is free of charge. [support@meyertech.co.uk](mailto:support@meyertech.co.uk)
3. By Facsimile (+44(0)161 628 9811). Available 24 hours a day. Our normal response to facsimiles is next working day. This support is free of charge.
4. Site visits. Subject to availability, our engineers are available to attend site to assess and help with particular system problems firsthand. This service is chargeable. Please contact our Sales department on +44(0)161 628 8406 for further details and availability.

Meyertech offer Extended Support Contracts on all their software products. Please contact our Sales department on 0161 628 8406 to discuss your requirements or visit our website [www.meyertech.co.uk](http://www.meyertech.co.uk)

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**Unit 4E Queensway Business Centre**  
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**Scunthorpe**  
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## Warranty

Please refer to Meyertech Limited 'Terms & Conditions of Sale of Goods & Services' for interpretation.

1. If the Buyer establishes to the Seller's reasonable satisfaction that there is a defect in the materials or workmanship of the Goods manufactured, then the Seller shall at its option, at its sole discretion and within a reasonable time,
  - a. arrange for the repair or making good such defect or failure in such Goods free of charge to the Buyer (including all costs of transportation of any Goods or materials to and from the Buyer for that purpose),
  - b. replace such Goods with Goods which are in all respects in accordance with the Contract, or subject, in every case, to the remaining provisions of this Condition 1 provided that the liability of the Seller under this Condition 1 shall in no event exceed the purchase price of such Goods and performance of anyone of the above options shall constitute an entire discharge of the Seller's liability under this warranty.
2. Condition 1 shall not apply unless the Buyer:
  - a. notifies the Seller in writing of the alleged defect within 12 (twelve) months from delivery or such other period or periods as may be agreed in writing between the Seller and the Buyer, and
  - b. allows the Seller a reasonable opportunity to inspect the relevant Goods.
3. For the avoidance of doubt, the Seller shall be under no liability under the warranty in Condition 1 above:
  - a. where such defects arise from any drawing, design or specification supplied by the Buyer; or
  - b. where such defects arise from fair wear and tear, wilful damage, or negligence of a party other than the Seller (or its employees or authorised personnel), abnormal working conditions, failure to follow the Seller's instructions (whether oral or in writing), misuse or alteration or repair of the Goods without the Seller's approval; or
  - c. where such defects arise in parts, materials or equipment which have not been manufactured or designed by the Seller but have been purchased at the Buyer's request by the Seller from the Buyer's designer and manufacturer or from some other third party (the "**Third Party Supplier**").
  - d. if the total price of the Goods has not been paid by the due date for payment
  - e. in respect of any type of defect, damage or wear specifically excluded by the Seller by notice in writing; or
  - f. if the Buyer makes any further use of the Goods after giving notice in accordance with Clause 1
4. Any repaired or replaced Goods shall be redelivered to the Buyer free of charge to the original point of delivery but otherwise in accordance with and subject to these Conditions.
5. Alternatively to Condition 1 the Seller shall be entitled at its absolute discretion on return of the defective Goods to the Seller (at the Seller's request) to refund the price of the defective Goods in the event that such price shall already have been paid by the Buyer to the Seller, or, if such price has not been paid, to relieve the Buyer of all obligation to pay the sum by the issue of a credit note in favour of the Buyer in the amount of such price.
6. In respect of all Goods supplied to the Seller by a Third Party Supplier the Seller will on request pass on to the Buyer (in so far as reasonably possible) the benefit of any warranty given to the Seller by such Third Party Supplier and will (on request) supply to the Buyer details of the terms and conditions of such warranty and copies of any relevant product information sheets, technical data sheets or product leaflets issued by such Third Party Supplier and the Buyer shall be solely responsible to the entire exclusion of the Seller for complying with the same.
7. For the purposes of Condition 1 references to Goods shall be deemed to exclude software.
8. The Buyer acknowledges that software in general is not error-free and agrees that the existence of such errors in the Software Programs shall not constitute a breach of this Contract.
9. In the event that the Buyer discovers a material error which results in the Programmed Products not performing substantially in accordance with the Functional Specification, or the Licensed Programs not performing substantially in accordance with the relevant Program Documentation and notifies the Seller of the error within 90 days from the date of the Seller making available the respective software to the Buyer (the '**warranty period**') the Seller shall at its sole option either refund the price which the Buyer has paid to the Seller (or if such price has not been paid, relieve the Buyer of all obligations to pay the sum) in respect of the respective software or use all reasonable endeavours to correct by patch or new release (at its option) that part of the software which does not so comply provided that such non-compliance has not been caused by any modification, variation or addition to the software not performed by the Seller or caused by its incorrect use, abuse or corruption of the software by use of the software with other software or on equipment with which it is incompatible,
10. To the extent permitted by English law, the Seller disclaims all other warranties, with respect to the software which it provides pursuant to the Contract, either express or implied, including but not limited to any implied warranties of satisfactory quality or fitness for any particular purpose.
11. The Buyer is solely responsible for various scanning the software that it receives from the Seller pursuant to the Contract.
12. The Seller warrants that it will use reasonable skill and care in providing the Services to the buyer